

ABSTRACT

A white or whitish luminescent material for phosphorescence is provided by synthesizing an organometallic complex that is able to convert a triplet excited state into light emission. In particular, a white electroluminescent device that has a high luminous efficiency and can be manufactured easily is provided by using the organometallic complex to manufacture a white or whitish electroluminescent device. The electroluminescent device is used to provide a light-emitting device with low power consumption. A fluorescent and phosphorescent material represented by a general formula (2) is synthesized. Since this material can emit both components of fluorescence and phosphorescence in the region of visible light, white or whitish luminescence can be achieved, which is applied to an electroluminescent device or a light-emitting device.

